

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Cancelled).

Claim 2 (Currently Amended): A method for pretreating a sample, which contains various lipoproteins, prior to measuring cholesterol existing in specific one of said lipoproteins in said sample, which comprises causing an enzyme, which acts upon free cholesterol as a substrate, and a reaction accelerator, which is selected from flufenamic acid, mefenamic acid, 2,2',6',2"-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin ~~or~~ and mevinolin, to act upon said sample to ~~consume~~ convert only said free cholesterol in advance under conditions that said lipoproteins remain substantially unchanged.

Claim 3 (Cancelled).

Claim 4 (Currently Amended): A method for quantitating cholesterol existing in a specific lipoprotein in a sample, which comprises causing ~~an enzyme~~ cholesterol dehydrogenase, which acts upon free cholesterol as a substrate, to act upon said sample with said lipoprotein contained therein to ~~consume~~ convert only said free cholesterol under conditions that said lipoproteins remain substantially unchanged; and then measuring said cholesterol, which exists in said specific lipoprotein, by using a substance which acts upon said specific lipoprotein only.

Claim 5 (Currently Amended): A method for quantitating cholesterol existing in a specific lipoprotein in a sample, which comprises causing an enzyme, which acts upon free cholesterol as a substrate, and a reaction accelerator, which is selected from the flufenamic acid, mefenamic acid, 2,2',6',2"-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monesin ~~or~~ and mevinlin, to act upon said sample with said lipoprotein contained therein to ~~consume~~ convert only said free cholesterol under conditions that said lipoproteins remain substantially unchanged; and then measuring said cholesterol, which exists in said specific lipoprotein, by using a substance which acts upon said specific lipoprotein only.

Claim 6 (Cancelled).

Claim 7 (Previously Presented): A quantitation method according to claim 4, wherein said specific lipoprotein is high density lipoprotein.

Claim 8 (Withdrawn): A pretreatment agent for a sample to be measured for cholesterol, comprising an enzyme, which acts upon free cholesterol as a substrate, and substantially no substance which acts upon lipoprotein.

Claim 9 (Withdrawn): A pretreatment agent for a sample to be measured for cholesterol, comprising an enzyme, which acts upon free cholesterol as a substrate, a reaction accelerator which is selected from flufenamic acid, mefenamic acid, 2,2',6',2"-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and substantially no substance which acts upon lipoprotein.

Claim 10 (Withdrawn): A pretreatment agent for a sample to be measured for cholesterol, comprising an enzyme, which acts upon free cholesterol as a substrate, and substantially no cholesterol esterase.

Claim 11 (Withdrawn): A pretreatment agent for a sample to be measured for cholesterol, comprising an enzyme, which acts upon free cholesterol as a substrate, a reaction accelerator which is selected from flufenamic acid, mefenamic acid, 2,2',6',2"-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and substantially no cholesterol esterase.

Claim 12 (Withdrawn): A pretreatment agent according to claim 8, wherein said enzyme is cholesterol dehydrogenase or cholesterol oxidase.

Claim 13 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising cholesterol oxidase and a hydrogen peroxide consuming substance; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, cholesterol esterase, and a color developer.

Claim 14 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising cholesterol dehydrogenase and a coenzyme; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, and cholesterol esterase.

Claim 15 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

- (1) a first reagent comprising cholesterol dehydrogenase and a coenzyme; and
- (2) a second reagent comprising a substance which acts upon said specific lipoprotein only, cholesterol oxidase, cholesterol esterase, peroxidase, and a color developer.

Claim 16 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

- (1) a first reagent comprising cholesterol oxidase, cholesterol esterase, and a hydrogen peroxide consuming substance; and
- (2) a second reagent comprising a substance which acts upon said specific lipoprotein only, and a color developer.

Claim 17 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

- (1) a first reagent comprising cholesterol dehydrogenase, a coenzyme, and cholesterol esterase; and
- (2) a second reagent comprising a substance which acts upon said specific lipoprotein only.

Claim 18 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

- (1) a first reagent comprising cholesterol dehydrogenase, a coenzyme, and cholesterol esterase; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, cholesterol oxidase, peroxidase, and a color developer.

Claim 19 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising cholesterol oxidase and a hydrogen peroxide consuming substance;

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only; and

(3) a third reagent comprising cholesterol esterase and a color developer.

Claim 20 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising cholesterol dehydrogenase and a coenzyme;

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only; and

(3) a third reagent comprising cholesterol esterase.

Claim 21 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising cholesterol dehydrogenase and a coenzyme;

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only; and

(3) a third reagent comprising cholesterol oxidase, cholesterol esterase, peroxidase, and a color developer.

Claim 22 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising cholesterol dehydrogenase, a coenzyme, and a coenzyme reaction product consuming substance; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, and cholesterol esterase.

Claim 23 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising cholesterol dehydrogenase, a coenzyme, and a coenzyme reaction product consuming substance; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, cholesterol esterase, and a color developer.

Claim 24 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol oxidase, (b) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (c) a hydrogen peroxide consuming substance; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, cholesterol esterase, and a color developer.

Claim 25 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol dehydrogenase, (b) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (c) a coenzyme; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, and cholesterol esterase.

Claim 26 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol oxidase, (b) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, (c) cholesterol esterase, and (d) a hydrogen peroxide consuming substance; and

(2) a second reagent comprising a substance, which acts upon said specific lipoprotein only, and a color developer.

Claim 27 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol dehydrogenase, (b) a coenzyme, (c) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (d) cholesterol esterase; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only.

Claim 28 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol dehydrogenase, (b) a coenzyme, (c) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (d) cholesterol esterase; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, cholesterol oxidase, peroxidase, and a color developer.

Claim 29 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol oxidase, (b) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (c) a hydrogen peroxide consuming substance;

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only; and

(3) a third reagent comprising cholesterol esterase and a color developer.

Claim 30 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol dehydrogenase, (b) a reaction accelerator selected from



flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (c) a coenzyme;

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only; and

(3) a third reagent comprising cholesterol esterase.

Claim 31 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol dehydrogenase, (b) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (c) a coenzyme;

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only; and

(3) a third reagent comprising cholesterol oxidase, cholesterol esterase, peroxidase, and a color developer.

Claim 32 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein; comprising the following reagents:

(1) a first reagent comprising (a) cholesterol dehydrogenase, (b) a coenzyme, (c) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2''-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (d) coenzyme reaction product consuming substance; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, and cholesterol esterase.

Claim 33 (Withdrawn): A quantitation kit for cholesterol in a specific lipoprotein, comprising the following reagents:

(1) a first reagent comprising (a) cholesterol dehydrogenase, (b) a coenzyme, (c) a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2"-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin, and (d) coenzyme reaction product consuming substance; and

(2) a second reagent comprising a substance which acts upon said specific lipoprotein only, cholesterol esterase, and a color developer.

Claim 34 (Withdrawn): A reaction accelerator for an enzyme capable of acting upon free cholesterol as a substrate, which is selected from flufenamic acid, mefenamic acid, 2,2',6',2"-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin or mevinolin.

Claim 35 (Withdrawn): A reaction accelerator according to claim 34, wherein said enzyme is cholesterol oxidase or cholesterol dehydrogenase.

Claims 36-37 (Cancelled).

Claim 38 (Previously Presented): A pretreatment method according to claim 2, wherein said enzyme is cholesterol oxidase or cholesterol dehydrogenase.

Claim 39 (Previously Presented): A quantitation method according to claim 5, wherein said enzyme is cholesterol oxidase and/or cholesterol dehydrogenase.

Claim 40 (Previously Presented): A quantitation method according to claim 5, wherein said specific lipoprotein is high density lipoprotein.

Claim 41 (Withdrawn): A pretreatment agent according to claim 9, wherein said enzyme is cholesterol dehydrogenase or cholesterol oxidase.

Claim 42 (Withdrawn): A pretreatment agent according to claim 10, wherein said enzyme is cholesterol dehydrogenase or cholesterol oxidase.

Claim 43 (New): A method for quantitating free cholesterol in a sample which contains various lipoproteins, which comprises conducting a cholesterol oxidase reaction in said sample in the presence of a reaction accelerator selected from flufenamic acid, mefenamic acid, 2,2',6',2"-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin and mevinolin, and then measuring said free cholesterol.

Claim 44 (New): A method for quantitating free cholesterol and an esterified cholesterol in a sample which contains various lipoproteins, which comprises causing at least an enzyme, which acts upon free cholesterol as a substrate, and a reaction accelerator, which is selected from flufenamic acid, mefenamic acid, 2,2',6',2"-terpyridine, tiglic acid, fusidic acid, betamethasone acetate, monensin and mevinolin, to act upon said free cholesterol.

Claim 45 (New): A method for quantitating cholesterol existing in a specific lipoprotein in a sample, which comprises causing cholesterol oxidase, which acts upon free cholesterol as a substrate, to act upon said sample with said lipoprotein contained therein to ~~consume~~ convert only said free cholesterol under conditions that said lipoproteins remain

.Application No. 09/926,818

Reply to Office Action of April 22, 2003

substantially unchanged; and then measuring said cholesterol, which exists in said specific lipoprotein, by using a substance which acts upon said specific lipoprotein only.

DISCUSSION OF THE AMENDMENT

Claims 1 and 3 have been cancelled. Claim 4 has been amended by limiting the enzyme to --cholesterol dehydrogenase--, as supported by Claim 6. Claim 6 has been canceled as redundant. Claims 36 and 37 have been cancelled and replaced with new Claims 43 and 44, respectively. Claims 43 and 44 recite that the quantitating is --in a sample which contains various lipoproteins--. In addition, Claim 43 includes a step of measuring the free cholesterol. Claim 44 recites the term --free cholesterol and an esterified cholesterol-- in place of “total cholesterol” as recited in Claim 37. New Claim 45 has been added, analogous to Claim 4, but wherein the enzyme is cholesterol oxidase. Finally, the term “consume” has been replaced with --convert-- where present in the claims.

No new matter is believed to have been added by the above amendment. Claims 2, 4-7, 38-40, 43-45 are now active in the application. Claims 8-35, 41 and 42 stand withdrawn from consideration.